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(54) **IMPLANTABLE TISSUE PERFUSION SENSING SYSTEM AND METHOD**

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(58) **Field of Classification Search**

None

See application file for complete search history.

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(57) **ABSTRACT**

A medical device for sensing cardiac events that includes a plurality of light sources capable of emitting light at a plurality of wavelengths, and a detector to detect the emitted light. A processor determines a plurality of light measurements in response to the emitted light detected by the detector, updates, for each of the plurality of wavelengths, a first normalization coefficient and a second normalization coefficient in response to the detected emitted light, and adjusts the determined plurality of light measurements in response to the first normalization coefficient and the second normalization coefficient.

12 Claims, 19 Drawing Sheets